

PCT09

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/743,731

DATE: 06/18/2001
TIME: 16:26:00

Input Set : A:\08106-004001.TXT
Output Set: N:\CRF3\06182001\I743731.raw

ENTERED

4 <110> APPLICANT: Smit, John
6 <120> TITLE OF INVENTION: CLEAVAGE OF CAULOBACTER PRODUCED
7 RECOMBINANT FUSION PROTEINS
9 <130> FILE REFERENCE: 08106-004001
11 <140> CURRENT APPLICATION NUMBER: 09/743,731
C--> 12 <141> CURRENT FILING DATE: 2001-04-25
14 <150> PRIOR APPLICATION NUMBER: PCT/CA99/00637
15 <151> PRIOR FILING DATE: 1999-07-14
17 <150> PRIOR APPLICATION NUMBER: CA 2,237,704
18 <151> PRIOR FILING DATE: 1998-07-14
20 <160> NUMBER OF SEQ ID NOS: 11
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 15
26 <212> TYPE: PRT
27 <213> ORGANISM: Artificial Sequence
29 <220> FEATURE:
30 <223> OTHER INFORMATION: Fusion protein
32 <400> SEQUENCE: 1
33 Leu Ser Glu Ile Lys Gly Val Ile Val His Arg Leu Glu Gly Val
34 1 5 10 15
36 <210> SEQ ID NO: 2
37 <211> LENGTH: 15
38 <212> TYPE: PRT
39 <213> ORGANISM: Artificial Sequence
41 <220> FEATURE:
42 <223> OTHER INFORMATION: Fusion protein
44 <400> SEQUENCE: 2
45 Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Leu
46 1 5 10 15
48 <210> SEQ ID NO: 3
49 <211> LENGTH: 12
50 <212> TYPE: PRT
51 <213> ORGANISM: Artificial Sequence
53 <220> FEATURE:
54 <223> OTHER INFORMATION: Synthetically generated peptide
56 <400> SEQUENCE: 3
57 Ser Pro Leu Gly Pro Ala Gly Asp Pro Glu Ala Ser
58 1 5 10
60 <210> SEQ ID NO: 4
61 <211> LENGTH: 3300
62 <212> TYPE: DNA
63 <213> ORGANISM: Caulobacter crescentus
65 <220> FEATURE:
66 <221> NAME/KEY: CDS
67 <222> LOCATION: (101)...(3179)
69 <400> SEQUENCE: 4

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70	gctattgtcg acgtatgacg tttgctctat agccatcgct gctccatgc gcgccactcg	60
71	gtcgcagggg gtgtgggatt ttttttggga gacaatcctc atg gcc tat acg acg	115
72	Met Ala Tyr Thr Thr	
73	1 5	
75	gcc cag ttg gtg act gcg tac acc aac gcc aac ctc ggc aag gcg cct	163
76	Ala Gln Leu Val Thr Ala Tyr Thr Asn Ala Asn Leu Gly Lys Ala Pro	
77	10 15 20	
79	gac gcc acc acg ctg acg ctc gac gcg tac gcg act caa acc acc cag	211
80	Asp Ala Ala Thr Thr Leu Thr Asp Ala Tyr Ala Thr Gln Thr Gln	
81	25 30 35	
83	acg ggc ggc ctc tcg gac gcc gct gcg ctg acc aac acc ctg aag ctg	259
84	Thr Gly Gly Leu Ser Asp Ala Ala Leu Thr Asn Thr Leu Lys Leu	
85	40 45 50	
87	gtc aac agc acg acg gct gtt gcc atc cag acc tac cag ttc ttc acc	307
88	Val Asn Ser Thr Ala Val Ala Ile Gln Thr Tyr Gln Phe Phe Thr	
89	55 60 65	
91	ggc gtt gcc ccg tcg gcc gct ggt ctg gac ttc ctg gtc gac tcg acc	355
92	Gly Val Ala Pro Ser Ala Ala Gly Leu Asp Phe Leu Val Asp Ser Thr	
93	70 75 80 85	
95	acc aac acc aac gac ctg aac gac gcg tac tac tcg aag ttc gct cag	403
96	Thr Asn Thr Asn Asp Leu Asn Asp Ala Tyr Tyr Ser Lys Phe Ala Gln	
97	90 95 100	
99	gaa aac cgc ttc atc aac ttc tcg atc aac ctg gcc acg ggc gcc ggc	451
100	Glu Asn Arg Phe Ile Asn Phe Ser Ile Asn Leu Ala Thr Gly Ala Gly	
101	105 110 115	
103	gcc ggc gcg acg gct ttc gcc gcc tac acg ggc gtt tcg tac gcc	499
104	Ala Gly Ala Thr Ala Phe Ala Ala Tyr Thr Gly Val Ser Tyr Ala	
105	120 125 130	
107	cag acg gtc gcc acc gcc tat gac aag atc atc ggc aac gcc gtc gcg	547
108	Gln Thr Val Ala Thr Ala Tyr Asp Lys Ile Gly Asn Ala Val Ala	
109	135 140 145	
111	acc gcc gct ggc gtc gac gtc gcg gcc gtc gtg gct ttc ctg agc cgc	595
112	Thr Ala Ala Gly Val Asp Val Ala Ala Val Ala Phe Leu Ser Arg	
113	150 155 160 165	
115	cag gcc aac atc gac tac ctg acc gcc ttc gtg cgc gcc aac acg ccg	643
116	Gln Ala Asn Ile Asp Tyr Leu Thr Ala Phe Val Arg Ala Asn Thr Pro	
117	170 175 180	
119	ttc acg gcc gct gcc gac atc gat ctg gcc gtc aag gcc gcc ctg atc	691
120	Phe Thr Ala Ala Asp Ile Asp Leu Ala Val Lys Ala Ala Leu Ile	
121	185 190 195	
123	ggc acc atc ctg aac gcc gcc acg gtg tcg ggc atc ggt ggt tac gcg	739
124	Gly Thr Ile Leu Asn Ala Ala Thr Val Ser Gly Ile Gly Gly Tyr Ala	
125	200 205 210	
127	acc gcc acg gcc gcg atg atc aac gac ctg tcg gac ggc gcc ctg tcg	787
128	Thr Ala Thr Ala Ala Met Ile Asn Asp Leu Ser Asp Gly Ala Leu Ser	
129	215 220 225	
131	acc gac aac gcg gct ggc gtg aac ctg ttc acc gcc tat ccg tcg tcg	835
132	Thr Asp Asn Ala Ala Gly Val Asn Leu Phe Thr Ala Tyr Pro Ser Ser	
133	230 235 240 245	

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135	ggc	gtg	tcg	ggt	tcg	acc	ctc	tcg	ctg	acc	acc	ggc	acc	gac	acc	ctg	883
136	Gly	Val	Ser	Gly	Ser	Thr	Leu	Ser	Leu	Thr	Thr	Gly	Thr	Asp	Thr	Leu	
137					250				255							260	
139	acg	ggc	acc	gcc	aac	aac	gac	acg	tcc	gtt	gct	ggt	gaa	gtc	gcc	ggc	931
140	Thr	Gly	Thr	Ala	Asn	Asn	Asp	Thr	Phe	Val	Ala	Gly	Val	Ala	Gly		
141					265				270							275	
143	gct	gcg	acc	ctg	acc	gtt	ggc	gac	acc	ctg	acg	ggc	ggt	gct	ggc	acc	979
144	Ala	Ala	Thr	Leu	Thr	Val	Gly	Asp	Thr	Leu	Ser	Gly	Gly	Ala	Gly	Thr	
145					280				285							290	
147	gac	gtc	ctg	aac	tgg	gtg	caa	gct	gct	gct	gct	acg	gct	ctg	ccg	acc	1027
148	Asp	Val	Leu	Asn	Trp	Val	Gln	Ala	Ala	Val	Thr	Ala	Leu	Pro	Thr		
149					295				300							305	
151	ggc	gtg	acg	atc	tcg	ggc	atc	gaa	acg	atg	aac	gtg	acg	tcg	ggc	gct	1075
152	Gly	Val	Thr	Ile	Ser	Gly	Ile	Glu	Thr	Met	Asn	Val	Thr	Ser	Gly	Ala	
153					310				315							320	325
155	gcg	atc	acc	ctg	aac	acg	tct	tcg	ggc	gtg	acg	ggt	ctg	acc	gcc	ctg	1123
156	Ala	Ile	Thr	Leu	Asn	Thr	Ser	Ser	Gly	Val	Thr	Gly	Leu	Thr	Ala	Leu	
157					330				335							340	
159	aac	acc	aac	acc	agc	ggc	gct	caa	acc	gtc	acc	gcc	ggc	gct	ggc		1171
160	Asn	Thr	Asn	Thr	Ser	Gly	Ala	Ala	Gln	Thr	Val	Thr	Ala	Gly	Ala	Gly	
161					345				350							355	
163	cag	aac	ctg	acc	gcc	acg	acc	gcc	gct	caa	gcc	gct	aac	acc	gtc	gcc	1219
164	Gln	Asn	Leu	Thr	Ala	Thr	Ala	Ala	Gln	Ala	Ala	Asn	Asn	Val	Ala		
165					360				365							370	
167	gtc	gac	ggg	cgc	gcc	aac	gtc	acc	gtc	gcc	tcg	acg	ggc	gtg	acc	tcg	1267
168	Val	Asp	Gly	Arg	Ala	Asn	Val	Thr	Val	Ala	Ser	Thr	Gly	Val	Thr	Ser	
169					375				380							385	
171	ggc	acg	acc	acg	gtc	ggc	aac	tcg	gcc	gct	tcg	ggc	acc	gtg	tcg		1315
172	Gly	Thr	Thr	Val	Gly	Ala	Asn	Ser	Ala	Ala	Ser	Gly	Thr	Val	Ser		
173					390				395							400	405
175	gtg	agc	gtc	gct	aac	tcg	acg	acc	acc	acg	ggc	gct	atc	gcc	gtg		1363
176	Val	Ser	Val	Ala	Asn	Ser	Ser	Thr	Thr	Thr	Thr	Gly	Ala	Ile	Ala	Val	
177					410				415							420	
179	acc	ggt	ggt	acg	gcc	gtg	acc	gtg	gct	caa	acg	gcc	ggc	aac	gcc	gtg	1411
180	Thr	Gly	Gly	Thr	Ala	Val	Thr	Val	Ala	Gln	Thr	Ala	Gly	Asn	Ala	Val	
181					425				430							435	
183	aac	acc	acc	ttg	acg	caa	gcc	gac	gtg	acc	gtg	acc	ggt	aac	tcc	acg	1459
184	Asn	Thr	Thr	Leu	Thr	Gln	Ala	Asp	Val	Thr	Val	Thr	Gly	Asn	Ser	Ser	
185					440				445							450	
187	acc	acg	gcc	gtg	acg	gtc	acc	caa	acc	gcc	gcc	acc	gcc	ggc	gct		1507
188	Thr	Thr	Ala	Val	Thr	Val	Thr	Gln	Thr	Ala	Ala	Thr	Ala	Gly	Ala		
189					455				460							465	
191	acg	gtc	gcc	ggt	cgc	gtc	aac	ggc	gct	gtg	acg	atc	acc	gac	tct	gcc	1555
192	Thr	Val	Ala	Gly	Arg	Val	Asn	Gly	Ala	Val	Thr	Ile	Thr	Asp	Ser	Ala	
193					470				475							480	485
195	gcc	gcc	tcg	gcc	acg	acc	gcc	ggc	aag	atc	gcc	acg	gtc	acc	ctg	ggc	
196	Ala	Ala	Ser	Ala	Thr	Thr	Ala	Gly	Lys	Ile	Ala	Thr	Val	Thr	Leu	Gly	
197					490				495							500	
199	agc	ttc	ggc	gcc	acc	atc	gac	tcg	acg	gct	ctg	acg	acc	gtc	aac		1651

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200 Ser Phe Gly Ala Ala Thr Ile Asp Ser Ser Ala Leu Thr Thr Val Asn		
201 505	510	515
203 ctg tcg ggc acg ggc acc tcg ctc ggc atc ggc cgc ggc gct ctg acc		1699
204 Leu Ser Gly Thr Gly Thr Ser Leu Gly Ile Gly Arg Gly Ala Leu Thr		
205 520	525	530
207 gcc acg ccg acc gcc aac acc ctg acc ctg aac gtc aat ggt ctg acg		1747
208 Ala Thr Pro Thr Ala Asn Thr Leu Thr Leu Asn Val Asn Gly Leu Thr		
209 535	540	545
211 acg acc ggc gcg atc acg gac tcg gaa gcg gct gct gac gat ggt ttc		1795
212 Thr Thr Gly Ala Ile Thr Asp Ser Glu Ala Ala Ala Asp Asp Gly Phe		
213 550	555	560
215 acc acc atc aac atc gct ggt tcg acc gcc tct tcg acg atc gcc agc		1843
216 Thr Thr Ile Asn Ile Ala Gly Ser Thr Ala Ser Ser Thr Ile Ala Ser		
217 570	575	580
219 ctg gtg gcc gcc gac gcg acg acc ctg aac atc tcg ggc gac gct cgc		1891
220 Leu Val Ala Ala Asp Ala Thr Thr Leu Asn Ile Ser Gly Asp Ala Arg		
221 585	590	595
223 gtc acg atc acc tcg cac acc gct gcc gcc ctg acg ggc atc acg gtg		1939
224 Val Thr Ile Thr Ser His Thr Ala Ala Ala Leu Thr Gly Ile Thr Val		
225 600	605	610
227 acc aac acg gtt ggt gcg acc ctc ggc gcc gaa ctg gcg acc ggt ctg		1987
228 Thr Asn Ser Val Gly Ala Thr Leu Gly Ala Glu Leu Ala Thr Gly Leu		
229 615	620	625
231 gtc ttc acg ggc ggc gct ggc cgt gac tcg atc ctg ctg ggc gcc acg		2035
232 Val Phe Thr Gly Gly Ala Gly Arg Asp Ser Ile Leu Leu Gly Ala Thr		
233 630	635	640
235 acc aag gcg atc gtc atg ggc gcc ggc gac gac acc gtc acc gtc agc		2083
236 Thr Lys Ala Ile Val Met Gly Ala Gly Asp Asp Thr Val Thr Val Ser		
237 650	655	660
239 tcg gcg acc ctg ggc gct ggt ggt tcg gtc aac ggc ggc gac ggc acc		2131
240 Ser Ala Thr Leu Gly Ala Gly Ser Val Asn Gly Gly Asp Gly Thr		
241 665	670	675
243 gac gtt ctg gtg gcc aac gtc aac ggt tcg tcg ttc agc gct gac ccg		2179
244 Asp Val Leu Val Ala Asn Val Asn Gly Ser Ser Phe Ser Ala Asp Pro		
245 680	685	690
247 gcc ttc ggc ggc ttc gaa acc ctc cgc gtc gct ggc gcg gcg gct caa		2227
248 Ala Phe Gly Gly Phe Glu Thr Leu Arg Val Ala Gly Ala Ala Ala Gln		
249 695	700	705
251 ggc tcg cac aac gcc aac ggc ttc acg gct ctg cca ctg ggc gcg acg		2275
252 Gly Ser His Asn Ala Asn Gly Phe Thr Ala Leu Gln Leu Gly Ala Thr		
253 710	715	720
255 gcg ggt gcg acg acc ttc acc aac gtt gcg gtc gat gtc ggc ctg acc		2323
256 Ala Gly Ala Thr Thr Phe Thr Asn Val Ala Val Asn Val Gly Leu Thr		
257 730	735	740
259 gtt ctg gcg gct ccg acc ggt acg acg acc gtg acc ctg gcc aac gcc		2371
260 Val Leu Ala Ala Pro Thr Gly Thr Thr Val Thr Leu Ala Asn Ala		
261 745	750	755
263 acg ggc acc tcg gac gtg ttc aac ctg acc ctg tcg tcc tcg gcc gct		2419
264 Thr Gly Thr Ser Asp Val Phe Asn Leu Thr Leu Ser Ser Ala Ala		

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265	760	765	770					
267	ctg	gcc	gct	ggt acg gtt gtc	gct ggc gag acg	gtg aac atc	2467	
268	Leu	Ala	Ala	Gly Thr Val Ala	Leu Ala Gly Val	Glu Thr Val Asn Ile		
269	775		780		785			
271	gcc	gcc	acc	gac acc aac acg	acc gct cac	gtc gac acg	ctg acg ctg	2515
272	Ala	Ala	Thr	Asp Thr Asn Thr	Ala His Val	Asp Thr Leu Thr	Leu	
273	790		795		800		805	
275	caa	gcc	acc	tcg gcc aag tcg	atc gtg gtg	acg ggc aac	gcc ggt ctg	2563
276	Gln	Ala	Thr	Ser Ala Lys Ser	Ile Val Val	Thr Gly Asn Ala	Gly Leu	
277						810	820	
279	aac	ctg	acc	acc ggc aac acg	gct gtc acc	acg ttc gac	gcc agc	2611
280	Asn	Leu	Thr	Asn Thr Gly Asn	Thr Ala Val	Thr Ser Phe Asp	Ala Ser	
281						825	835	
283	gcc	gtc	acc	ggc acg gct	ccg gct gtg acc	ttc gtg	tcg gcc aac acc	2659
284	Ala	Val	Thr	Gly Thr Ala Pro	Ala Val Thr	Phe Val Ser	Ala Asn Thr	
285						840	850	
287	acg	gtg	ggt	gaa gtc gtc	acg atc	cgc ggc ggc	gct ggc gcc gac	2707
288	Thr	Val	Gly	Glu Val Val	Thr Ile Arg	Gly Ala Gly	Ala Asp Ser	
289						855	865	
291	ctg	acc	ggt	tcg gcc acc	aat gac acc	atc atc	ggt ggc gct ggc	2755
292	Leu	Thr	Gly	Ser Ala Thr Ala	Asn Asp Thr	Ile Ile Gly	Gly Ala Gly	
293	870		875		880		885	
295	gct	gac	acc	ctg tac acc	ggc ggt acg	gac acc ttc	acg ggt ggc	2803
296	Ala	Asp	Thr	Leu Val Tyr	Thr Gly Gly	Thr Asp Thr	Phe Thr Gly Gly	
297						890	895	
299	acg	ggc	gcf	gat atc ttc	gat atc aac	gct atc	ggc acc tcg acc gct	2851
300	Thr	Gly	Ala	Asp Ile Phe Asp	Ile Asn Ala	Ile Gly	Thr Ser Thr Ala	
301						905	910	
303	tcc	gtg	acg	atc acc	gac gcc	gct gtc	ggc aag ctc gac	2899
304	Phe	Val	Thr	Ile Thr Asp	Ala Ala Val	Gly Asp Lys	Leu Asp Leu Val	
305						920	930	
307	ggc	atc	tcg	acg aac	ggc gct	atc gct	gac ggc gcc ttc	2947
308	Gly	Ile	Ser	Thr Asn Gly	Ala Ile Ala Asp	Gly Ala Phe	Gly Ala Ala	
309						935	940	
311	gtc	acc	ctg	ggc gct	gct gcg	acc ctg	gac gct gct	2995
312	Val	Thr	Leu	Gly Ala Ala	Ala Thr Leu Ala	Gln Tyr Leu Asp	Ala Ala	
313						950	955	
315	gct	gcc	ggc	gac	ggc acc	tcg gtt	gcc aag tgg ttc	3043
316	Ala	Ala	Gly	Asp Gly Ser	Gly Thr Ser	Val Ala Lys	Trp Phe Gln Phe	
317						970	975	
319	ggc	ggc	gac	acc tat	gtc gtc	gac agc	tcg gct ggc gcg	3091
320	Gly	Gly	Asp	Thr Tyr Val	Val Val	Asp Ser Ser	Ala Gly Ala Thr Phe	
321						985	990	
323	gtc	agc	ggc	gct	gac	gca	tcg acg ctg	3139
324	Val	Ser	Gly	Ala Asp	Ala Val	Ile Lys	Leu Thr Gly Leu Val	
325						1000	1005	
327	acc	acc	tcg	gcc	ttc	gcc acc	t aagcgaacgt	3189
328	Thr	Thr	Ser	Ala Phe	Ala Thr	Glu Val	Leu Thr Leu Ala	
329						1015	1020	
						1025		

VERIFICATION SUMMARY

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L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date